August Nuclear Materials Subgroup Highlights

The Hanford STCG Nuclear Materials (NM) Subgroup met on August 17, 2000 in the ETB Spokane River Room, at 1:30 p.m.

Bob Holt introduced himself as the co-lead of the NM Subgroup. He is working in the Spent Nuclear Fuel (SNF) area on-site. The SNF research is now going to be part of the NM Focus Area's (NMFA) Scope. Allison Wright is the other DOE co-lead of this subgroup and is working in the PFP area. Alex Stone and Deborah Singleton both attended for Ecology but Oliver Wang, who deals with PFP issues for Ecology, may be assigned as the Ecology representative in the future. Bob gave an overview of S&T at Hanford and stated that EM-50 has the lead at RL. Rick Wible is the DOE lead for EM-50 at RL on this subgroup. Hanford has sent in proposals through PNNL to solve our NM needs at Hanford. Two of these have been selected for funding next FY. We need to integrate the S&T research with Site needs and with the programs. The SNF program does not have many S&T needs any longer as the work is well underway. The PFP program though does have needs and these will be discussed at a later meeting.

Terry Walton discussed how EM-50 funding is distributed through the DOE system to meet Site needs throughout the Complex. Currently, EM-50 has $250 million for this FY that are allocated through the Focus Areas, such as the NMFA, to meet the needs of each Site. The needs at Hanford are sent to the Focus Areas after project input. The needs that we will send to the NMFA will be mainly based on PFP needs this year. These needs will become Technology Insertion Points (TIPs) in the Site planning documents so as to integrate S&T planning into project planning at Hanford. The needs are not just written for the Focus Area's use but are also put out on the Internet and given to industry to see if any commercially available solution exists to our problems. Terry sees the subgroup as the technology advocates meeting our needs in each area. The Fluor Technology Management team is putting together S&T plans for major projects on-site including PFP, SNF, and the decommissioning of the 324/327 Buildings. The results of these plans are to guide the needs process and the three mentioned above are to be finished in November.

Allison Wright and Bill Bonner gave an overview of the NMFA. It was based on information from an April 2000 viewgraph presentation entitled "NMFA Overview" given by representatives from the NMFA. Handouts of the presentation were distributed to all subgroup members. The DOE Idaho and Albuquerque Operation Offices jointly manage the NMFA. LANL is the lead laboratory for the NMFA. The merger of the Plutonium Focus Area and the Nuclear Materials Stewardship Technology Development Program formed the NMFA. The first page of the NMFA home page on the internet and the first page of the LANL Lead Lab home page were distributed to the subgroup members along with contact lists from both home pages. The URL for the NMFA is http://id.inel.gov/nmfa/ and for the lead lab at LANL is http://www-emtd.lanl.gov/NMFA/LeadLab.html.

In FY01 the NMFA has asked for funding for two product lines: Stabilization and Packaging & Storage. The total funding requested for the product lines in FY01 was $7.02 million. In FY02 the NMFA will have five product lines: Stabilization, Packaging & Storage, Materials Processing, Long-Term Storage and SNF. The NMFA will be requesting $ 13.9 million in FY02 for these five product lines. David Robertson of PNNL is slated to be the project manager of the Long-Term Storage product line in FY02.

PNNL sent in six proposals to the NMFA for funding in FY01. A handout with summaries of these proposals was distributed to the subgroup. A table identifying the Hanford needs addressed by the proposals was also distributed to subgroup members. The NMFA has selected two of the proposals for funding next FY and a third will be funded if more money becomes available next year. A team of PNNL and project engineers developed the proposals. Copies of the Program Execution Guidance (PEG) for both of the projects were distributed to subgroup members. The first project, "Optimal Pu Precipitation for Stabilization Feed Preparation", was funded at $250K next FY and for $450K in FY02. This project is to help neutralize and calcine nitric acid solutions containing Pu in the PFP. A series of tests will be run to confirm process behavior and quantify the key effect of process parameters on processing time and product properties.

The second project, "Pu Thermal Treatment Furnace Load-Out System" and is funded at $479K in FY01. The objective of the project is to design and fabricate a furnace load-out system that would allow existing PFP furnaces to remain at temperature while loading Pu materials for stabilization into and out of the furnaces. This would result in large productivity improvements by speeding up the processing time resulting in very large cost savings. Hanford projects will be contributing to this effort on a cost sharing basis also. A copy of the criteria that the NMFA used to prioritize the proposals was also distributed to the subgroup members.

Bob Holt was asked by the NMFA to review 12 proposals put together by SR and INEEL dealing with SNF issues. He was to rank them using criteria provided by the NMFA. Bill Bonner commented that this should have been an open process for the entire Complex to participate in. These are to be the precursors for FY02 funding. The only way these would be funded in FY01 is if extra money became available. Bob distributed copies of the 12 proposals to the subgroup.

Rick Wible talked about the schedule for this year's S&T needs process. A copy of the schedule from the Hanford Baseline Updating Guidance (BUG) document was distributed to the subgroup. Rick stated that EM-50 would like us to speed up the process and he will have a revised schedule at our next meeting, after this issue is resolved. The next subgroup meeting will be to review the S&T needs submitted by Hanford contractors. The meeting is scheduled for September 26, 1:00 p.m. in the EESB Stampede Room.

Nuclear Materials Subgroup Meeting Attendees - 08/17/00

Bill Bonner	PNNL	372-6263
Bob Holt	RL-SFO	376-9989
Deborah Singleton	Ecology	736-5722
Alex Stone	Ecology	736-3018
Terry Walton	FH	372-4548
Dave Watrous	HAB	372-2819
Steve Weakley	PNNL	372-4275
Rick Wible	RL-STP	372-4776
Allison Wright	RL-MDD	373-7303